

## **LISTING OF CLAIMS**

1. (currently amended) A heating cable comprising:

a first conductor which extends along the length of the cable;

a second conductor which extends along the length of the cable;

a separation layer which extends along the length of the cable and is interposed between the first and second conductors; and

an outer insulating jacket extending along the length of the cable and around the first and second conductors and the separation layer;

wherein the first and second conductors generate heat when passing current and are connected at ~~[[one]]~~ a first end of the cable in series such that current can flow in both directions through the first and second conductors ~~such that, if and when~~ the first and second conductors are connected at ~~the other~~ a second end of the cable to ~~respective poles~~ of an AC power supply~~[[,]]~~ equal currents flow in opposite directions through adjacent portions of the first and second conductors; and

wherein the separation layer is formed such that ~~the electrical resistance~~ the separation layer ~~provides between adjacent portions of the conductors~~ has a negative temperature characteristic, and the first conductor is formed such that the first conductor has a positive temperature characteristic.

2. (original) A heating cable according to claim 1, wherein the first and second conductors are coaxial and the separation layer is tubular, the first conductor being located inside the tubular separation layer and the second conductor being located outside the tubular separation layer.

3. (original) A heating cable according to claim 2, wherein the first conductor is formed from twisted together components each of which comprises a fibre

core around which a positive temperature coefficient wire has been wrapped to form a helix.

Claims 4-11. (cancelled)

12. (previously presented) A heating cable according to claim 2, wherein the second conductor is a heating wire wrapped around the tubular separation layer to form a helix.

13. (previously presented) A heating cable according to claim 3, wherein the second conductor is a heating wire wrapped around the tubular separation layer to form a helix.

14. (canceled)

15. (canceled)

16. (canceled)

17. (currently amended) A heating cable according to claim 1, wherein the separation layer is formed such that the separation layer melts if heated to a predetermined threshold temperature.

Claims 18-28. (canceled)